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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/800,679

03/06/2001

Stefaan Valere Albert Coussement

P4647

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06/21/2007

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EXAMINER

MATTIS, JASON E

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

06/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/800,679

Applicant(s)

COUSSEMENT, STEFAAN
VALERE ALBERT

Examiner

Jason E. Mattis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the Request for Continued Examination filed 2/7/07. Due to the amendment, the previous rejection of claims 1-15 and 31-45 under 35 U.S.C. 101 has been withdrawn. Claims 1-45 are currently pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 10, 16-23, 25, 31-38, and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Draginich et al. (U.S. Pat. 6560329) in view of Andersson (WO 01/01660 as cited in the IDS filed 7/8/05).

With respect to claim 1, Draginich et al. discloses an agent capability application (See the abstract of Draginich et al. for reference to an automatic call distribution system containing and application to receive agent status and route calls to selected agents based on agent status). Draginich et al. also discloses monitoring target resources and rendering capability information to routing applications

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(See column 6 lines 59-64 and Figure 4 of Draginich et al. for reference to monitoring agent status information and sending the status information, capability information, to a routing controller when an agent station changes state). Draginich et al. further discloses a first portion for collecting data regarding capability of the target agent resources (See column 4 lines 36-45, column 6 lines 59-64 and Figures 1 and 4 of Draginich et al. for reference to agent stations 11-14 sending status information to a routing controller 20 meaning that there is a first program portion to monitor for a change in agent station status, or collect capability data, and send this information to the routing controller 20). Draginich et al. also discloses a second portion for integrating the data and rendering the capability information to the routing application and using a portion of the integrated capability information for routing calls to the best destination (See column 4 lines 46-54 and Figure 1 of Draginich et al. for reference to analyzing, or integrating, the agent status data and rendering this analyzed data to be used in routing calls to a best selected agent). Although Draginich et al. discloses collecting and rendering capability data, Draginich et al. does not disclose that capability information includes protocol capability data.

With respect to claim 16, Draginich et al. discloses an agent proxy system operable in at least one communication center (See column 3 lines 48-60 and Figure 1 of Draginich et al. for reference to a routing controller 20, which performs the function of an agent proxy system, in an automated call distribution system 10). Draginich et al. also discloses agent resources enabling agents to process

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communication events (**See column 3 lines 48-60 and Figure 1 of Draginich et al. for reference to agent stations 11-14 each having an interactive communication unit).**

Draginich et al. further discloses one or more routing applications subscribing to the one or more of the agent proxy servers (**See column 4 lines 36-54 and Figure 1 of**

Draginich et al. for reference to the routing controller 20 having an application to route calls based on call data and agent status data). Draginich et al. also discloses

a communications network connecting the agent resources the applications and the one or more agent proxy servers (**See column 3 lines 48-60 and Figure 1 of Draginich et**

al. for reference to data links 24 that connect the agent stations 11-14 and the routing controller 20). Draginich et al. further discloses a capability application for

monitoring capabilities of the agent resources for rendering capability information to the subscribing routing applications (**See the abstract, column 6 lines 59-64 and Figure 4**

of Draginich et al. for reference to monitoring agent status information and

sending the status information, capability information, to a routing controller

when an agent station changes state). Draginich et al. also discloses a first portion

for collecting information regarding capabilities of the target agent resources (**See**

column 4 lines 36-45, column 6 lines 59-64 and Figures 1 and 4 of Draginich et al.

for reference to agent stations 11-14 sending status information to a routing

controller 20 meaning that there is a first program portion to monitor for a change

in agent station status, or collect capability information, and send this

information to the routing controller 20). Draginich et al. further discloses a second

portion for integrating the information and rendering the capability information to the

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subscribing routing application (**See column 4 lines 46-54 and Figure 1 of Draginich et al. for reference to analyzing, or integrating, the agent status data and rendering this analyzed data to be used in routing calls**). Although Draginich et al. discloses monitoring and rendering capability data, Draginich et al. does not disclose that capability information includes protocol capability data

With respect to claim 31, Draginich et al. discloses a communication center system (**See column 3 lines 48-60 and Figure 1 of Draginich et al. for reference to an automated call distribution system 10**). Draginich et al. also discloses a method for providing agent resource capabilities to subscribing routing applications (**See column 4 lines 36-54, column 6 lines 59-64, and Figures 1 and 4 of Draginich et al. for reference to providing agent station status data to a routing controller that contains a program for routing calls**). Draginich et al. further discloses monitoring capabilities of individual agent resources by a first portion of a resource capability application (**See column 4 lines 36-45, column 6 lines 59-64 and Figures 1 and 4 of Draginich et al. for reference to agent stations 11-14 sending status information to a routing controller 20 meaning that there is a first program portion to monitor for a change in agent station status, or collect capability information, and send this information to the routing controller 20**). Draginich et al. also discloses integrating data from the first program portion and rendering agent resource capabilities to the subscribing routing applications by a second portion of the agent resource capability application and routing calls to the best destination using a portion of the integrated agent resource capabilities (**See column 4 lines 46-54 and Figure 1 of**

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Draginich et al. for reference to analyzing, or integrating, the agent status data and rendering this analyzed data to be used in routing calls to a best selected agent). Although Draginich et al. discloses monitoring and rendering capability data, Draginich et al. does not disclose that capability information includes protocol capability data

With respect to claims 1, 16, and 32, Andersson, in the field of communications, discloses collecting and rendering protocol capability data of target agents for use in routing applications (See page 7 line 16 to page 8 line 8 and page 8 line 16 to page 9 line 3 of Andersson for reference to a database 6 that stores agent definitions including the skills and capabilities of agents, including media type capability data, which is protocol capability data, and for reference to using the stored capability data in a routing application). Collecting and rendering protocol capability data of target agents for use in routing applications has the advantage of allowing customer sessions using different protocol types to be efficiently routed to agents, which have the capability to receive a session of the appropriate protocol type.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Andersson, to combine collecting and rendering protocol capability data of target agents for use in routing applications, as suggested by Andersson, with the system and method of Draginich et al., with the motivation being to allow customer sessions using different protocol types to be

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efficiently routed to agents, which have the capability to receive a session of appropriate the protocol type.

With respect to claims 2, 17, and 32, Draginich et al. discloses that the target agent resources comprise one or more individual agent stations in at least one communication center with the agent stations equipped with one or more communication devices (See column 3 lines 48-60 and Figure 1 of Draginich et al. for reference to the automated call distribution system 10, a call center, having several agent stations 11-14 with each station having an interactive communication unit).

With respect to claims 3, 18, and 33, Draginich et al. discloses that multiple copies or version of the first portion execute on platforms monitoring individual ones of the one or more communication devices (See column 4 lines 36-45, column 6 lines 59-64, and Figures 1 and 4 of Draginich et al. for reference to each agent station 11-14 individually sending status updates to the routing controller 20 using data link 24, meaning that each agent station 11-14 must have a first portion to collect the status data before it is sent to the routing controller). Draginich et al. also discloses providing data to at least one agent proxy server executing a copy of the second portion with the at least one agent proxy server dedicated to integrating the data for the one or more communication devices (See column 4 lines 36-54 and Figure 1 of Draginich et al. for reference to routing controller 20 acting as an agent proxy server by receiving the status data from agent stations 11-14 and analyzing, or integrating, the data for use in routing calls).

With respect to claims 4, 19, and 34, Draginich et al. discloses that the one or more platforms upon which the first portions execute are computers in the agent stations (See column 3 lines 48-60, column 4 line 55 to column 5 line 2, and Figure 1 of Draginich et al. for reference to each agent station 11-14 including a processor, or computer, P, that operates a data interface coupling routing controller 20 to the agent stations to send agent status data and for reference to the agent stations being computers).

With respect to claims 5, 20, and 35, Draginich et al. discloses that the one or more of the platforms upon which the first portions execute comprise individual ones of the one or more communication devices (See column 3 lines 48-60, column 4 line 55 to column 5 line 2, and Figure 1 of Draginich et al. for reference to the agent stations 11-14 being a computer with a processor, P, that provides the interface for sending the status data to the routing controller 20 using).

With respect to claims 6, 21, and 36, Draginich et al. discloses that the one or more of the platforms upon which the first portions execute comprise individual service proxy platforms also enabling services for one of the communication devices (See column 3 lines 48-60, column 4 line 55 to column 5 line 2, and Figure 1 of Draginich et al. for reference to the agent stations 11-14 being a computer with a processor, P, that provides the interface for sending the status data to the routing controller 20 using meaning that first portions execute in the processor of the computer that also is used to enable services for the communications devices).

With respect to claims 7, 22, and 37, Draginich et al. discloses that the service proxy platform is a Voice-over-Internet Protocol proxy enabling a VoIP telephone (See column 4 line 55 to column 5 line 2 and Figure 1 of Draginich et al. for reference to the agent stations 11-14 being computers with IP telephony interfaces that enable a VoIP telephone).

With respect to claims 8, 23, and 38, Draginich et al. discloses that the service proxy platform is a call-control gateway platform (See column 4 line 55 to column 5 line 2 and Figure 1 of Draginich et al. for reference to the agent stations 11-14 being computers with IP telephony interfaces, which is a type of call-control gateway platform).

With respect to claims 10, 25, and 40, Draginich et al. discloses that the platforms, agent stations, and subscribing applications are all a part of a single communication center (See column 3 lines 48-60 and Figure 1 of Draginich et al. for reference to the agent stations 11-14 and the routing server 20 all being a part of a single communication center, automated call distribution system 10).

4. Claims 9, 24, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Draginich et al. in view of Andersson et al. as applied to claims 1-8, 10, 16-23, 25, 31-38, and 40 above, and in further view of Dhir et al. (U.S. Pat. 6553113).

With respect to claims 9, 24, and 39, the combination of Draginich et al. and Andersson does not disclose that the first portions provide data to more than one proxy server to provide redundancy.

With respect to claims 9, 24, and 39, Dhir et al., in the field of communications, discloses a call routing system in a call center that includes sending data to multiple servers, including backup servers for purposes of redundancy (See column 4 line 48 to column 5 line 50 of Dhir et al. for reference to using multiple central server systems to retrieve status data and route calls). Sending data to more than one server has the advantage of providing redundancy to ameliorate or eliminate the effects of crashes and malfunctions, as disclosed by Dhir et al. (See column 5 lines 2-5).

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Dhir et al., to combine sending data to multiple servers, as suggested by Dhir et al., with the application, system, and method of Draginich et al. and Andersson, with the motivation being to provide redundancy to ameliorate or eliminate the effects of crashes and malfunctions.

5. Claims 11, 13-15, 26, 28-30, 41, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Draginich et al. in view of Andersson et al. as applied to claims 1-8, 10, 16-23, 25, 31-38, and 40 above, and in further view of Goss (U.S. Pat. 6687241).

With respect to claims 13, 28, and 43, Draginich et al. discloses multiple sets of agent stations having communication devices monitored by the copies or versions of the first portion (See column 4 lines 36-45 and Figure 1 of Draginich et al. for reference to each of the agent stations 11-14 individually sending status data messages to routing controller 20, meaning each of the agent stations 11-14 is monitored by a

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copy or version of the first portion). The combination of Draginich et al. and Andersson does not disclose multiple agent proxy servers executing copies of the second portion wherein agent proxy servers are associated in a hierarchical fashion such that higher-level agent proxy servers aggregate data from multiple lower-level agent proxy servers with the aggregated data at the higher level servers comprising data from all the agent stations associated with each of the lower-level servers.

With respect to claims 13, 28, and 43, Goss, in the filed of communications, discloses a hierarchical system used in a call center having lower-level agent proxy servers, call center contact servers 28, and higher level agent proxy servers, enterprise contact server 100, with the call center contact servers 28 receiving state information from devices in a local call center, i.e. call center A, and sending the state information to the enterprise contact server 100, which comprises data from all the agent stations associated with the lower-level call center contact servers 28 **(See column 5 lines 1-35 and Figure 1 of Goss for reference to call center contact servers 28 receiving status data from devices in local call centers and sending the data to enterprise contact server 100).** Having multiple agent proxy servers arranged in a hierarchical system has the advantage of allowing the processing of agent status data to be split up into smaller processing groups reducing the amount of status messages that any one proxy server has to receive and allowing data to be locally received from agent proxy servers that are local to a specific call center before sending the local data to a global call center proxy server containing call data from all devices in the global system.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Goss, to combining having multiple agent proxy servers arranged in a hierarchical system, as suggested by Goss, with the application, system, and method of Draginich et al. and Andersson, with the motivation being to allow the processing of agent status data to be split up into smaller processing groups reducing the amount of status messages that any one proxy server has to receive and to allow data to be locally received from agent proxy servers that are local to a specific call center before sending the local data to a global call center proxy server containing call data from all devices in the global system.

With respect to claims 14, 29, and 44, Draginich et al. discloses that the platforms, agent stations, and subscribing applications are all a part of a single communication center **(See column 3 lines 48-60 and Figure 1 of Draginich et al. for reference to the agent stations 11-14 and the routing server 20 all being a part of a single communication center, automated call distribution system 10)**.

With respect to claims 11, 15, 26, 30, 41, and 45, the combination of Draginich et al. and Andersson does not disclose that the platforms, agent stations, and subscribing applications are distributed over a plurality of communication centers.

With respect to claims 11, 15, 26, 30, 41, and 45, Goss, in the field of communications, discloses a call center with the agent stations, platforms, or contact servers, and subscribing applications distributed over a plurality of communication centers **(See column 5 lines 1-35 and Figure 1 of Goss for reference to call center contact servers 28, agent stations, and their applications being distributed over a**

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plurality of call centers, i.e. call centers A and B). Distributing platforms, agent stations, and subscribing applications over a plurality of communication centers has the advantage of allowing the agents operating the communication center to be located in geographically disparate areas so that it is not necessary for all agents to be in the same physical location.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Goss, to combine distributing platforms, agent stations, and subscribing applications over a plurality of communication centers, as suggested by Goss, with the application, system, and method of Draginich et al. and Andersson, with the motivation being to allow the agents operating the communication center to be located in geographically disparate areas so that it is not necessary for all agents to be in the same physical location.

6. Claims 12, 27, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Draginich et al. in view of Andersson et al. as applied to claims 1-8, 10, 16-23, 25, 31-38, and 40 above, and in further view of Shtivelman (U.S. Pat. 5926539).

With respect to claims 12, 27, and 42, the combination of Draginich et al. and Andersson does not disclose more than one first portion dedicated to distinct ones of the communication devices associated with a single agent station with the data from the more than one first portion aggregated for the single agent station at the proxy server associated with the single agent station.

With respect to claims 12, 27, and 42, Shtivelman, in the field of communications, discloses a call center where more than one program dedicated to more than one communication device associated with a single agent is used to gain status information for each device associated with the agent and aggregating this data for the single agent at a server **(See column 3 line 57 to column 4 line 7 of Shtivelman for reference to a software routing for determining agent status having a protocol for determining active status of a telephone, and another protocol or checking for live network calls with clients via a computer station, meaning that there are multiple first portions providing status data for multiple devices, a telephone and a computer, associated with a single agent station and aggregating this data to return an agent available or an agent busy result).** Having more than one first portion dedicated to distinct ones of the communication devices associated with a single agent station with the data from the more than one first portion aggregated for the single agent station at the proxy server associated with the single agent station has the advantage of allowing a single agent of a call center to have multiple types of communication devices that are monitored at the same time to provide better service to customers by allowing the customers to communicate with the agents using different types of communication devices.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Shtivelman, to combine having more than one first portion dedicated to distinct ones of the communication devices associated with a single agent station with the data from the more than one first portion aggregated

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for the single agent station at the proxy server associated with the single agent station, as suggested by Shtivelman, with the application, system, and method of Draginich et al. and Andersson, with the motivation being to allow a single agent of a call center to have multiple types of communication devices that are monitored at the same time to provide better service to customers by allowing the customers to communicate with the agents using different types of communication devices.

Response to Arguments

7. Applicant's arguments filed 2/7/07 have been fully considered but they are not persuasive.

Regarding Applicant's argument that Draginich et al. does not disclose monitoring target resources and rendering capability information to routing applications, the Examiner respectfully disagrees. Draginich et al. discloses a routing controller receiving agent status messages from agent stations (See column 6 lines 59-64 and Figure 4 of Draginich et al.). This means the agent stations must perform some sort of monitoring to know when to generate and send the agent status messages to the routing controller. Thus, Draginich et al. does disclose monitoring target resources and rendering capability information to routing applications.

Regarding Applicant's argument that the status information taught by Draginich et al. does not correspond to the agent capability information as claimed, the Examiner respectfully disagrees. As shown in the rejections above, the status information of

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Draginich et al. is data regarding capability of target agent resources. For example, the state of an agent device, such as ready, idle, ringing, active, wrap up, and hold, is information regarding whether the agent device is capability of handling an incoming call at the current time. This status information allows the routing of calls to be based on specific current capabilities of agent resources. Therefore, the status information of Draginich et al. has to do with the current capability of an agent or agent station to receive a new call.

Applicant's arguments that Andersson does not disclose how its rule set is created in its database is moot because the claim limitation of monitoring target resources and rendering capability information to routing applications, as shown in the rejections and arguments above, is found in the teachings of Draginich et al. Andersson is used in the rejections above as a teaching of a different type of capability information that may be used to route calls, not as a teaching of how the capability information is disseminated.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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